

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 and 2 (canceled).

3 (new). Method for infrared data transmission from several transmitter units to a common receiver station, the transmitter units transmitting the data in blocks with a common carrier frequency and in time intervals of the same length for all transmitter units according to the maximum number of transmitter units, the data blocks being transmitted with a modulation of the carrier frequency of 56 kHz, the length of the time intervals for all transmitter units differing at least by twice the transmission time for a maximum data block size, and the shortest interval corresponding at least to a multiple of double the transmission time for the maximum data block size, the multiple corresponding to the maximum number of transmitter units.

4 (new). The method of claim 3, wherein the transmission times of the data blocks transmitted by the transmitter units are equal, and the length of the time intervals of the same length of the maximum number of the transmitter units less a multiple of the longest time interval corresponding to one transmitter unit plus the length of the shortest time interval and the transmission time correspond to data black size.

5 (new). Apparatus for infrared data transmission from several transmitter units to a common receiver station, the transmitter units repeatedly transmitting the data in blocks with a common carrier frequency and in time intervals of the same length for all transmitter units according to the maximum number of transmitter units, the data blocks being transmitted with a modulation of the carrier frequency of 56 kHz, the length of the time intervals for all transmitter units differing at least by twice the transmission time for a maximum data block size, and the shortest interval corresponding at least to a multiple of double the transmission time for the maximum data block size, the multiple corresponding to the maximum number of transmitter units, wherein each transmitter unit comprises a memory for combining the data into a respective one of the data blocks, a control unit connected to a timing element for reading the data blocks out of the memory, and a transmitter module for modulating the common carrier frequency with 56 kHz, the memory being capable of being read out in repeated time intervals predetermined with respect to the duration thereof in dependence on the number of transmission units and differing for each transmission unit, the time intervals extending step by step by at least double the transmission time for a data block from a minimum length of a time interval depending on the number of transmitter units and double the transmission time for a data block.